

### **REMARKS/ARGUMENTS**

Claims 1-32 remain in this application. None of the claims were amended in this response. The Specification was objected to for not having the Abstract on a separate page. In light of the present amendments to the specification, Applicants submit the objection has been addressed. Withdrawal of the objection is earnestly requested.

Claims 1 and 30-32 were rejected under 35 U.S.C. §102(e) as being anticipated by *Kobayakawa et al.* (US Patent 6,064,338).

Claims 2-3 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kobayakawa et al.* (US Patent 6,064,338) in view of *Scherzer* (US Patent 6,347,234).

Claims 4-29 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kobayakawa et al.* (US Patent 6,064,338) in view of *Scherzer* (US Patent 6,347,234) and further in view of *Teder et al.* (US Patent 5,544,156). Applicant traverses these rejections. Favorable reconsideration is respectfully requested.

Specifically, the cited art, alone or in combination, does not teach or suggest, among other things, “adjusting the transmitting power at the transmitter in dependence on the power control information item [generated on the basis of the estimated transmitting power needed],” “estimating the behavior of the transmission channel,” and “estimating the transmitting power needed based on the result of the estimation of the behavior of the transmission channel” as recited in claim 1 and similarly recited in claim 30.

*Kobayakawa* discloses control of adaptive array antennas (AAA) where a searcher (3) searches for chip synchronization timings and delay-time adjustment data by a correlation operation using matched filters, obtains a correlation signal from the signal received from each antenna element, and calculates a vector and a matrix necessary to perform adaptive control of the antenna using the correlation signals and inputs the vector and matrix to the adaptive weight calculating unit 4 (col. 6, lines 37-45). The adaptive weight calculating unit 4 calculates adaptive weights from the entered vector and matrix and a beam former 5 applies amplitude control and phase rotation control based upon the calculated weights to the signals of the selected paths prior to despreading, combines the results and outputs the resulting signal to the Rake receiver 6. As a result of this operation, the path arrival direction of a user signal is estimated from the correlation

signals and the signals received by each of the antennas are multiplied by the weights at arbitrary times in such a manner that the antenna beam is pointed in the direction estimated from this information, thereby pursuing the user (col. 6, lines 45-57). Thus, *Kobayakawa* does not adjust the transmitting power at the transmitter in dependence on the power control information item, but instead makes adjustments to the transmitting direction of the antenna.

Regarding the Response to Arguments, Applicants respectfully submit the analysis is incorrect. It cannot be said that the feed-forward adaptive weighting of *Kobayakawa* (col. 3, lines 59-61; col. 7, lines 47-51; col. 11, lines 59-64) has any kind of predictive quality to it. Furthermore, it is not the power that is adjusted in the minimization of interference signals, but is only the phase of the signal, which is matched to an antenna output having the strongest signal (which in turn minimizes interference). Nothing is disclosed in *Kobayakawa* that adjusts the transmitting power.

Also, *Kobayakawa* does not estimate the behavior of the transmission channel as asserted in the Office Action. Particularly, FIG. 7 discloses the process executed by the searcher and AWC unit for in-phase control (col. 10, lines 60-63), where the path selector 32 directly finds the correlation signal of each of the antenna elements that has the largest power to establish a start timing for a transmission path (col. 10, line 65 – col. 11, line 6). Accordingly, *Kobayakawa* also does not teach estimating the transmitting power needed based on the result of the estimation of the behavior of the transmission channel.

Regarding the Response to Arguments contained in the Office Action, Applicants reiterate that predictive control (i.e., estimating the behavior or estimating power needed) means that a future characteristic is established to build a basis for the predictive control. In contrast, *Kobayakawa* only discloses a method where successive (i.e., sequential) steps are carried out one after another (col. 9, lines 11-15) to determine an antenna direction based on currently-measured data. Based on the received data at the antennas, the data is correlated in the matched filters ME, and the antenna weights  $w$  can be calculated by the arithmetic unit and applied to form the proper beam using the same received data of the antennas as used for calculating the weights.

For at least these reasons, it is respectfully submitted that the rejections under 35 U.S.C. §102(e) are improper and should be withdrawn.

The *Scherzer* and *Teder* references do not solve the deficiencies of the *Kobayakawa* reference discussed above. As *Kobayakawa* does not teach the elements recited in claims 1 and 31, it follows that the rejections for all the claims that depend therefrom must also fall. Accordingly, it is respectfully submitted that the rejections under 35 U.S.C. §103 are improper and should be withdrawn.

In light of the above, Applicant respectfully submits that claims 1-32 of the present application are both patentable over the art of record, and respectfully requests that a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Examiner is authorized to deduct said fees from Deposit Account No.: 02-1818. If such a deduction is made, please indicate the attorney docket number (0112740-315) on the account statement.

Respectfully submitted,

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